

Designing a Low-Cost, Light-Weight Vehicle Using Additive Manufacturing

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The Indiana University-Purdue University Indianapolis (IUPUI) Jaguar team participates in several academic competitions. Both the SAE Clean Snowmobile Challenge and the Shell Eco-marathon benefit from reducing weight to the competition vehicles. Using a purpose-built 3D printer the team designed several parts for the vehicles to reduce weight and become more competitive. The re-engineered vehicles have reduced weight which makes the vehicles more fuel efficient thus environmental friendly without compromising the vehicle performance.